

# FORMER REYNOLDS ALUMINUM SITE - FACT SHEET The Confederated Tribes and Bands of the Yakama Nation Fisheries Resource Management Program

### Site Summary

The Former Reynolds Aluminum Site (the Site) is located along the north shore of the Columbia River approximately three miles west of downtown Longview, Cowlitz County, Washington at 4029 Industrial Way (Figure 1). The Site consists of approximately 416 acres, of which 100 have been developed (Anchor, 2007a). Riverfront property in this area is a mix of developed and open parcels with several industrial facilities near the water.

The Site originally contained the Reynolds Aluminum Facility, built in 1941 on the eastern portion of the property where aluminum reduction, smelting, and casting operations were performed (Anchor, 2007a). The Reynolds smelting facility operated for approximately 60 years producing aluminum products. The facility has gone through several changes in ownership particularly in the last 10 years. Currently identified potentially liable parties for the Site include Chinook Ventures LLC, which owns most of the Site facilities, and Northwest Alloys Inc., which maintains ownership of the underlying property.

The Site is relatively flat, with bedrock outcrops that rise through local soil

deposits to form features such as Mount Solo to the north. Natural or open land cover surrounds much of the immediate vicinity of the Site. Below the surface is approximately 100 feet of sand, silt, and clay that is permeable to water, and then another 100 to 200 feet of silt and clay that forms an impermeable layer. The aquifer below this layer is confined from the ground surface except where it is tapped with wells. This well water is used at Site facilities. Brown shale bedrock forms the base of the aquifer, between 397 and 410 feet below the surface of the ground.

Groundwater flows across the Site away from the Columbia River and towards the north and west Site boundaries where two drainage ditches are located. Waterborne contamination in the top layer of soil is moving towards these drainage ditches (Anchor, 2007a). The ditches funnel collected surface water to a pump station that leads to the Site's wastewater and stormwater collection and treatment system (Anchor, 2007b).

#### **Contaminants of Concern**

Six contaminants of concern (COCs) were identified in the Focused Feasibility Study: cyanide, fluoride, sulfates,

#### Legend Colid Ditch System Wetlands S de Boundary Colid Modin Plann Colid Right Colid Colid Right Colid Colid

# **Quick Facts**

- Site is located along the north shore of the Columbia River about three miles west of downtown Longview, Washington.
- Site was used for aluminum reduction, smelting, and casting from 1941 to the early 2000's.
- Contaminants include cyanide, fluoride, sulfates, PAHs, PCBs, mercury, and petroleum hydrocarbons.
- The Lower Columbia provides critical habitat for several listed salmonid and other fish species migrating inland from the Pacific Ocean.
- The Lower Columbia River supports important subsistence, commercial, and sport fisheries and numerous recreational activities including, boating, kayaking, swimming, and sightseeing.

polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), mercury, and petroleum hydrocarbons (Anchor, 2007b).

Several of these contaminants are typical for aluminum smelting and casting operations and generally result from the use of cryolite in the smelting pots and the leaching process used to recycle spent pot liner (SPL) material. The mercury at this Site was introduced through the use of mercury rectifiers that transformed the alternating current supplied from the power grid into direct current used in the potlines.

A Remedial Investigation Report in 2007 by Anchor Environmental LLC (Anchor, 2007a) concluded that mercury, PCBs, and petroleum hydrocarbon contamination were not detected at concentrations that exceeded Model Toxics Control Act (MTCA) Industrial Use cleanup levels where groundwater, sediment, and soil sampling was performed. Only one groundwater sample exceeded the

Former Reynolds Aluminum Fact Sheet Page # 1

#### Figure 1. Detail of Reynolds Aluminum Site, Longview, WA.

groundwater standard for total PAHs, suggesting that the extent of contamination is currently limited. Both the on-site ditches and former fuel island, which were identified as locations of contamination in the past, were remediated in 2008 by Northwest Alloys with Ecology's approval (Northwest Alloys, 2011). Washington State Ecology is currently working with the Site owners to complete a study and work plan which will guide the cleanup process

### Species and Habitats of Interest

The Columbia River is a major corridor for several salmonid species migrating inland from the Pacific Ocean. Chinook (spring, summer, and fall runs), coho, chum, and sockeye salmon and steelhead trout (summer and winter runs) all migrate through this section of the Columbia River, as do American shad, Pacific lamprey, and smelt. For several years, smelt runs have been inconsistent and often reduced in number.

White sturgeon are found in the Columbia River, which they use as a migratory corridor and for adult, spawning, and juvenile habitat. The Columbia River provides rearing, foraging, spawning and adult habitat for numerous resident fish, shellfish, plants, and wildlife species unique to the Pacific Northwest.

Multiple wetlands have been identified both on the Site and surrounding it. In particular the Closed Black Mud Pond has been identified as a wetland, as well as the thin stillage application area (where waste was once spread) to the east of the Closed Pond. Other wetland boundaries follow the drainage ditches west of the Site and along portions of the northern property boundary.

## Human Use

Human use resources that may be impacted by activities or contamination on the Site include anadromous fisheries in the Columbia River as well as wetlands on and adjacent to the Site. The Columbia River, and its tributaries including the nearby Cowlitz River, support subsistence, commercial, and sport fisheries for salmon, steelhead trout, and white sturgeon; and numerous recreational activities including, boating, kayaking and canoeing, swimming, birding, and sightseeing. Within a five-mile buffer of the Site, four boat launches (Willow Grove Boat Launch, Rainier Boat Ramp, Dibblee Point Beach Landing, Gearhart Gardens) and four campsites (Walker

# COLUMBIA RIVER: HONOR. PROTECT. RESTORE.

# Since time immemorial...

The sacred relationship with the Yakama People, the Salmon, and the Columbia River was established in ancient time. When the first people established themselves in this region, the Creator came and revealed that He was going to make human beings. He advised the first people to take care of these new beings. After lengthy discussions, it was so agreed that the first people would give of themselves to sustain the human beings and that the human beings would honor and take care of the first people. Then the Creator asked who would be the first to volunteer and the salmon came forward.

The relationship between the People, the Salmon, and the Columbia River is the foundation of the time-honored laws of the Yakama people: the laws that protect life and the cycles of nature and provide for human well being; the laws that govern our long house traditions; the laws that support our practices, which have sustained the Yakama people since time immemorial. The scared relationship of the Yakama people, the Salmon, and the mighty Columbia River is based on an understanding that all life is intertwined and interdependent. Today the Salmon has become the epitome of a time honored agreement; fighting to survive, fighting to maintain their natural life cycle, fighting to honor their agreement with the Creator and the Yakamas. Island West, Lord Island South, Lord Island East, Lord Island North) can be found.

# Yakama Nation Authority

The Yakama Nation is a federally recognized Tribe pursuant to the Treaty of 1855 (12 Stat. 951) with authority to manage, protect and restore treaty resources throughout the Pacific Northwest. The Columbia River, life blood of the Yakama Nation, has become a polluted and life threatening environment for salmon and other aquatic resources because of industrial development.

The Yakama Nation has the additional authority, as a natural resource trustee under Federal Superfund law, to initiate and oversee response and restoration actions that affect Treaty reserved rights and interests. Furthermore, the Yakama Nation's involvement in the remediation of contaminated sites and implementation of restoration activities ensures that these efforts are protective of Treaty resources. The Yakama Nation is committed to restoring a clean and productive Columbia River that sustains cultural practices and improves life for the tribe, tribal neighbors, and future generations.

# References

Anchor Environmental LLC. (Anchor). 2007a. Remedial Investigation Report Chinook Ventures Inc. and Northwest Alloys Inc. Prepared for the Washington State Department of Ecology. June.

Anchor Environmental LLC. (Anchor). 2007b. Focused Feasibility Study Chinook Ventures Inc. and Northwest Alloys Inc. Prepared for the Washington State Department of Ecology. September.

Northwest Alloys Inc. (NWA). 2011. Demolition and Cleanup Accomplishments at the Former Reynolds Longview Reduction Plant. June.